

Remarks

Claims 131-200 are in the application. Claims 131, 148, 157, 167, 172, 177, and 180 are in independent form. Reconsideration is requested.

The specification is objected to under 37 CFR 1.75(d)(1) as lacking an antecedent basis for the “computer readable medium” or “medium” recited in claims 180-187. Claims 180-187 have been amended to change “computer readable medium” or “medium” to “computer memory.” The computer memory is described in the specification at various locations, including paragraph [0037] in reference to an output device, paragraph [0048] in reference to an information apparatus, and paragraph [0084] in reference to an application server. Applicant submits that the subject matter of claims 180-187 is clearly described in the specification and request that the objection be withdrawn.

Claims 131, 133-137, and 143-200 stand rejected under 35 USC 102(e) for anticipation by Yacoub (US Pat. No. 6,452,692). Claims 132 and 138-142 stand rejected under 35 USC 103(a) for obviousness over Yacoub in view of Stewart (US Pat. Publ. No. 2004/0057075). Applicant responds as follows.

Yacoub describes a virtual printer that is coupled to a client station to generate a print job, the virtual printer receiving preferences from a user regarding the print job such as image quality and/or speed. The virtual printer sends the print job along with the user preferences over a network to a server. The server automatically determines which of the printers on the network comply with the user's print job preferences. The server automatically selects a printer that complies with the job preferences and is located physically near the user/client. When the job is complete, the server notifies the user through the virtual printer that the print job is complete and of the location of the printer selected by the server. If an error signal is returned by the selected printer before completion, the server automatically selects a different printer closely complying with the preferences. (Yacoub, col. 2, lines 29-44).

Each of independent claims 131, 148, 157, 167, 172, 177, and 180 has been amended to recite an output device object being received by a server or

delivered from a mobile information apparatus, together with at least part of a document object. The output device object and the document object are referred to as separate objects and correspond to different features, namely, the attributes related to the output device and the output content, respectively. Yacoub provides no teaching or suggestion of delivering from an information apparatus an output device object that corresponds to an output device.

Rather, Yacoub describes receiving at the virtual printer user preferences regarding the print job, such as image quality and/or speed.

At step 200, the user has selected the preferences of the job such as the quality of the print job, the speed and whether the image should be in black-and-white or in color. Though speed and quality are inversely related, with a higher quality leading to lower speed and a lower quality leading to a higher speed, the preferences can be treated as separate. The speed preference of the print job refers not to the user's choice of the number of pages-per-minute precisely, but rather whether the job should be rushed or can be delayed to guarantee that the print job preferences are better complied with. If a high quality image, with quality defined by the dots-per-inch (dpi) of the print image, is more important, then speed may be sacrificed. The print job preferences, namely, quality, speed, color, are only exemplary of three of the many preferences possible for a print job such as paper type, paper size, dithering, and so on. (Yacoub, col. 4, lines 44-59.)

These user preferences relate to job parameters or the manner in which a user would like a job to be printed, not to the actual characteristics or attributes of the output device or printer itself. As illustrated in Fig. 2 of Yacoub (reproduced below), the print server compares the user's print preferences against the characteristics of the available output devices or printers. The server automatically selects the most appropriate printer that complies with the print job preferences and is located nearest to the user. Yacoub teaches that "there is a need to reduce the level of user interaction in sending a print Job" [Col 4 line 16-17]. "A printer can automatically select an appropriate printer based on its location, capability and availability" [Col. 4 line 18-20]. Yacoub does not describe or teach that the print job preferences relate to the suitability or acceptability of data input to the printer so that the selected printer can suitably print the output data sent from the sever. Instead, Yacoub describes that "when a printer has an

error" [Col 4 line 21], "it should be the job of the server to automatically select another printer." [Col 4, line 22].

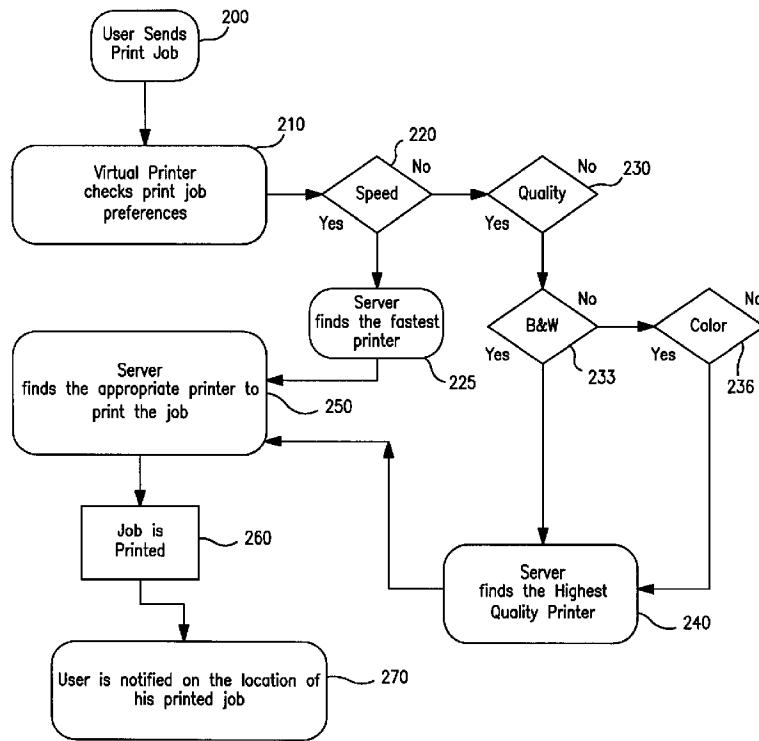


FIG. 2

Independent claim 131 recites a means receiving at a server application operated on a server a document object and an output device object, the document object and the output device object being received at the server application over a network that is distinct from the information apparatus and the output device.

Yacoub does not describe anything akin to an output device object. Yacoub does not describe or teach receiving at the server from the mobile information apparatus an output device object to a server, the output device object having one or more attributes corresponding to the output device. Instead, Yacoub teaches sending device independent print job preferences (e.g. printing

speed, color/black and white etc) to the server. The device independent print job preferences of Yacoub are not device dependent attributes of the printer.

In addition to the above distinction, independent claim 131 has also been amended to recite that the output device object includes “an indication of a language or a data format that is acceptable as input to the output device for rendering”. Support for this feature can be found in the specification for example in paragraph [0038], which references the “type of input languages, formats and or output data supported by an output device”. Yacoub does not describe or teach an output device object including an indication of a language or a data format that is acceptable as input to the output device for rendering. Following the teachings of Yacoub would lead one skilled in art to not send to the server attributes corresponding to the output device, including an indication of a language or a data format that is acceptable as input to the output device for rendering. In Yacoub, there is no motivation for one skilled in the art to send printer dependent attributes from the client device to the server because Yacoub emphasizes that the server automatically selects a printer. As a result, the server in Yacoub inherently must already have the printer dependent attributes to make the printer selection, thereby leading one skilled in the art away from sending printer dependent attributes from the client device to the server.

Independent claims 148, 157, 167, 172, 177, and 180 have been amended similarly.

Independent claims 131, 148, 157, 167, 172, 177, and 180 clarify the distinction between the output device object of the present invention and the user print job preferences of Yacoub. The user print job preferences of Yacoub relate to the manner (e.g., speed, black/white or color) in which a print job is to be printed. Print job preferences are independent of which printer. In contrast, the output device object of the present invention relates to the output device, and includes suitability or acceptability of the language, data form or format provided to the printer, as described in paragraph [0038] of the application. The user preference information of Yacoub does not relate at all to the suitability or

acceptability of the language, data form or format provided to the printer. The system of Yacoub presumes that the print job source is synchronized with the format requirements of the printer. If a printer in the system of Yacoub responds with an error, the server automatically selects another printer. In contrast, the use of an output device object as recited in the claims allows output content managed from a mobile information apparatus to be rendered more accurately at an output device with less potential error.

In addition to the above-described distinctions from Yacoub, amended independent claim 131 also recites that the device dependent output data are related at least in part to the indication of the language or data format included in the output device object for rendering the output content. Support for this feature can be found in the specification at paragraph [0087], which states that “converting the digital document into an output data [is] related at least in part to the output device object”. Yacoub does not describe or teach an output device object and accordingly does not describe device dependent output data that are related at least in part to the indication of a language or a data format included in the output device object.

Independent claims 148, 157, 167, 172, and 177 have also been amended to recite this feature. Analogously, independent claim 180 recites that the output device object is required at the server for generating device dependent output data corresponding to the output content and acceptable for rendering at the selected output device.

Moreover, claim 133 has been amended to recite “means for receiving from the mobile information apparatus one or more job objects having one or more attributes corresponding to the output job, including output quality.” The job object is described and supported in the specification at paragraphs [0039]-[0041], and the receiving of the job object is described at paragraph [0108], for example. The job object is distinct from the output device object and emphasizes and clarifies the distinction between the output device object recited in the claims and the device independent print job preferences used and described by Yacoub.

Furthermore, independent claim 131 has been further amended to clarify that the output data is delivered to the mobile information apparatus for rendering the output content at the output device. In contrast to delivering the output data to the mobile information apparatus, Yacoub describes the server as automatically sending the print job to a printer that is selected by the server. When the print job is complete, the server notifies the user of the the print job completion and of the location of the selected printer. (Yacoub, col 2, line 36-41.) Accordingly, Yacoub does not describe or suggest that the output data is delivered to the mobile information apparatus for rendering the output content at the output device.

In view of the numerous distinctions over the cited reference as described above, applicant believes the application is in condition for consideration and respectfully requests the same.

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